



The

# Broadcasters' Desktop Resource

[www.theBDR.net](http://www.theBDR.net)

... edited by Barry Mishkind – the Eclectic Engineer

## EAS Q&A

**With Clay Freinwald and Barry Mishkind**

*[January 2011] If the original 180-Day CAP/EAS Compliance Clock were a football game, we would be having our Halftime report about now. So, as they say on TV, let's go to the scoreboard and see where things stand. I will do some of the play-by-play, Clay is our color man...*

**Barry:** Well, Clay, let's take stock. The FCC let the Clock run down by almost two full months before issuing a six-month extension of the 180-Day Clock. As you analyze the situation, is there any clarity?

**Clay:** Like a football game, the teams still have “time-outs” that they can call, and there is always the chance that something might take place (like a foot of snowfall) that could cause a further delay in the game. I suspect, based on history, that the game may not be completed exactly when many would expect – or like.

**Barry:** Has anything else happened since September 30th? In other words, were there any scores?

**Clay:** Like football, Barry, this is a game of inches. The ball continues to move toward the goal, albeit at what sometimes appears to be glacial speed. I heard a great explanation the other day: At the outset, this whole project had rough, fuzzy edged borders. Slowly, over time, the size of the project is being reduced and the edges are becoming more defined.

Certainly a “first down” would be for the FCC to release a NOI or NPRM. As of yet, this has not taken place. Unfortunately, in this game, there is not a defined limit on the number of “downs.”

### TURNING THE PANIC MODE OFF

**Barry:** As you know, the big fear is that the 180-Day Clock, even with the extension, will run out before stations can buy their mandated EAS receivers. Everyone wants to know if there will be overtime. Will there be, or is there real reason for stations to panic?

**Clay:** Personally I have a problem with purchasing anything that must - at some point - become FCC compliant without first know what the Rules will be. This is sort of like agreeing to play football without knowing exactly where the goal lines are located nor how much time is left on the clock.

The risk can certainly be mitigated by having a “iron-clad” guarantee from the manufacturers that their new offering will be modified at their cost when those Rules do come out. Bottom line: it is likely another extension will be added.

This reminds me of the day when FM stereo came along (now you know I'm getting old!). Each station knew they would have to purchase a Stereo Modulation Monitor, although none were on the market at that point. So, the monitor our station purchased eventually had to be sent back to the manufacturer to have it modified to comply with the new, then released Rules. The good news is that, today, most of these new endecs can be upgraded on-line.

Time to panic? I do not think so. With that being said, if a station's legacy endec went up in a cloud of smoke, I would opt to replace it with one of the new boxes. I have heard that perhaps 20% of the legacy EAS boxes have already been replaced with new stuff. I know several groups have either purchased new equipment or are about to do so.

**Barry:** Good, so everyone can relax a bit. That makes this a good time to research the products available and make the best decision based on their individual situation. So, how many CAP capable EAS boxes are available now?

**Clay:** At this moment, I really do not know. The only units for which I have seen ads are the Sage Endec, Digital Alert Systems' DASDEC II, and the Trilithic EASyCAST. Furthermore, both TFT and Gorman-Redlich advertise products designed to convert the CAP data to SAME (the intent here is to permit the retention of a legacy EAS endec).

## **ONE STATE'S SOLUTION**

**Barry:** You told me that Washington State has been working with CAP for some time now. Are all the different agencies using the same equipment?

**Clay:** Washington is quite an exception; we have been working with CAP for about 6 years now. I am very fortunate to be the SECC Chair here as this state has been fortunate to have been part of a pilot program that focused on using CAP as a means of triggering alerts in an area of chemical stockpile work.

This has grown over the years to the point that last fall Washington State was able to accelerate the CAP conversion process and launched their own CAP-based system by providing some 65 CAP boxes to LP and State College stations across the state. This system is currently operating in parallel with their existing analog/SAME State Relay Network (SRN) distribution system - a network of mountaintop VHF transmitters tied together with a microwave system.

**Barry:** So, you have two complete systems in operation. That means you can watch and see the new system to make sure it is working correctly, right?

**Clay:** Yes. Of course, the distribution of CAP messages does require slightly different means. The new Washington State system uses a CAP-Server or Aggregator provided by MyStatesUSA. Distribution is via the Internet. With a number of additional stations have purchased new CAP capable endecs, as soon as those stations are connected to the system, the total number of CAP connected stations will soon be over 100 – one-third of the stations in our state!

## **TRAINING INCLUDED**

**Barry:** Certainly you have included training programs to help users understand the system.

**Clay:** Correct. At the January 13th SBE Chapter Meeting in Seattle, Don Miller, the Telecom Manager for Washington Emergency Management, came in to explain how the new system works. To say that he wowed those in attendance is an under-statement. As Chapter Chair, I had to close the meeting after almost 2-1/2 hours. However, even as I left the room, questions were still being asked.

Frankly we are excited. This State has a long history of thinking outside the box. Once again they have proved that you do not have to sit back and wait for the Feds to come up with solutions.

**Barry:** Can you explain the differences in the operation of the systems?

**Clay:** With the old way of sending alerts, EAS encoders were installed in locations that initiated EAS Messages. This required an emergency manager to talk into a microphone plugged into the EAS box, etc. As mentioned, that equipment is still there.

However, with our CAP system emergency managers need only have a computer connected to the Internet - and of course the magic code identifying them as an authorized user. The great news about this method is that *messages can be initiated from anywhere* with an Internet connection, even including a wireless device. In fact, a couple of years ago Don Miller demonstrated this ability by sending a state-wide DMO for Washington State from his laptop at an EAS Summit in Washington DC. Just try and do that with your old EAS boxes!

**Barry:** That is rather impressive.

**Clay:** But there is more. Perhaps this is not the best example, but if you consider SAME messages as if in black-and-white, CAP is full color - a whole new set of tools that were simply not available before. This get Emergency Managers as well as broadcasters very excited about the changes.

Here are some more of the advantages CAP offers:

1 - With the old EAS system voice messages were all initiated by someone speaking into a microphone connected to an endec and then the message was forwarded and relayed any number of times. In too many cases, when it came out of the speaker at a local radio or TV station it often sounded pretty bad.

With our new CAP system, EAS messages are composed in text, on a computer. That text message is then distributed via the Internet. The CAP endec uses a text to speech converter to read the message, completely eliminating all the scratchy, noisy and distorted audio. If an audio message is needed, CAP can carry it as an attached MP3 or WAV file.

2 - With the old EAS system a TV station generated its crawl from the Header Codes. So, the voice portion of the EAS message often said one thing while the crawl said another. CAP equipment completely eliminates that problem by allowing the TV station to generate its crawl from the text data. For the first time TV stations will be transmitting the same message visually and aurally.

3 - Broadcasters now can have EAS message texts right in front of them, making newscasts easier to produce. Think how valuable this could be for Amber Alerts, compared to the data on the grocery tape printer on the old EAS endecs.

4 - And speaking of Amber, since it can attach files, CAP has the ability to send a picture of the child with the alert, something SAME or legacy EAS Equipment simply cannot do.

**Barry:** How many sources currently can originate a Washington State CAP message?

**Clay:** Washington State has 39 Counties; Emergency Managers in all counties have now been trained on how to initiate EAS messages. Counting the State EOC, there are now 40 entry points for CAP-based EAS in our state.

## **WILL PART 11 GET IN THE GAME?**

**Barry:** Before we get back to the action, what can we expect in the Second Half?

**Clay:** The kickoff should be notice of the long-promised Part 11 rewrite. This is going to have to happen, the sooner the better. The Washington SECC is certainly looking forward to the opportunity to plug into this process our *actual* experiences with CAP.

**Barry:** Time for just one more cliché. Everyone should stay tuned to this channel for more information!

**Clay:** Quite so. There is more folks should know about CAP implementations going on, and we will discuss that next time.

---

*Much more information on CAP and EAS is available on the new [EAS Forum http://eas.radiolists.net](http://eas.radiolists.net), including current news and data on EAS, and a discussion group with CAP/EAS experts ready to answer your questions.*

**[Return to The BDR Menu](#)**